BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVAUATION COUNCIL

In the Matter of Application No. 2004-01: WIND RIDGE PARTNERS, LLC; WILD HORSE WIND POWER PROJECT	EXHIBIT 20 (AY-T)

APPLICANT'S PREFILED DIRECT TESTIMONY
WITNESS # 1: ANDREW YOUNG

Q Please state your name and business address.

A My name is Andrew Young and my business address is 210 SW Morrison. Suite 310, Portland, Oregon 97204.

Q Who is your employer and what are your position, occupation and profession?

A I am employed by Zilkha Renewable Energy. I am a mechanical engineer and my position is Development Director for the Northwest Region.

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

Q What are your primary duties and responsibilities?

A My duties and responsibilities include providing technical expertise in project planning and overseeing the development of wind power projects in the Northwest region. The development work I oversee includes working with landowners, evaluating wind resources, designing site layouts, coordinating environmental and other permitting related study work, working with utility transmission planners and engineers, developing schedules and working with utilities interested in purchasing wind power.

Q Would you please identify what has been marked for identification as Exhibit 20-1 (AY-1)?

A Exhibit 20-1 (AY-1) is a résumé of my educational background and employment experience which includes development and construction management of a number of utility-scale wind power projects since 1995.

Q Would you describe the Applicant?

A The Applicant is Wind Ridge Power Partners, LLC, a special purpose, limited liability company which will own and operate the Wild Horse Wind Power Project. This is explained clearly in Section 1.1 of our Application for Site Certification, or ASC, for the Wild Horse Wind Power Project.

Q Are you sponsoring any portions of the application for site certification for the Wild Horse Wind Power Project?

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

A Yes. I am sponsoring the following sections:

Section 1.1	Introduction	
Section 1.2	Purpose and Need for the Project and Associate Facilities	
Section 1.3	Decisions to be Made	
Section 1.4	Description of Alternatives	
Section 1.5	Summary of Potential Impacts and Mitigation Measures	
Section 1.6.4	Cumulative Impacts,	Health and Safety
Section 1.6.11	Cumulative Impacts,	Air Quality
Section 2.1	Proposed Project and Alternatives,	Introduction
Section 2.2	Proposed Project and Alternatives,	Description of the Proposed Project
Section 2.3	Proposed Project and Alternatives,	Alternatives
Section 2.7	Proposed Project and Alternatives,	Potential for Future Activities at Site
Section 3.2.2	Air Quality,	Impacts of the Proposed Action
Section 3.2.3	Air Quality,	Comparison of Impacts of Proposed Scenarios
Section 3.2.4	Air Quality,	Impacts of No Action Alternatives
Section 3.2.5	Air Quality,	Mitigation Measures
Section 3.2.6	Air Quality,	Significant Unavoidable Adverse Impacts
Section 3.3.2.3	Water Resources,	Water Use During Construction
Section 3.3.2.4	Water Resources,	Water Use During Operations
Section 3.16	Health and Safety	
Section 3.17.1	Cumulative Impacts,	Introduction
Section 3.17.2.	Cumulative Impacts,	Desert Claim Wind Power Project
Section 3.17.3	Cumulative Impacts,	Kittitas Valley Wind Power Project

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

Section 3.17.4 Cumulative Impacts, Project Comparison

Section 3.17.8 Cumulative Impacts, Health and Safety

Section 3.17.16 Cumulative Impacts, Air Quality

Section 4.1 Required EFSEC Information, Assurances

Section 4.3 Required EFSEC Information, Legal Descriptions and Ownerships

Section 4.4 Required EFSEC Information, Construction Management

Section 4.5 Required EFSEC Information, NPDES

Section 4.6 Required EFSEC Information, Emergency Plans

Section 4.7 Required EFSEC Information, Criteria Used for Transmission Route and Design

Section 4.8 Required EFSEC Information, Initial Site Restoration Plan

Q Are you sponsoring any exhibits or other documents that are part of the Application?

A I am sponsoring the following exhibits:

Exhibit 1A	Project Area Overview
Exhibit 1B	Project Site Layout
Exhibit 1C	Project Site Layout Aerial
Exhibit 1D	Site Layout with 60m (small) Turbines
Exhibit 1E	Site Layout with 90m RD (large) Turbines
Exhibit 2	Interconnection Substation Electrical One-Line Diagram
Exhibit 7	Temporary Air Quality Permit Application for Rock Crushing on Site
Exhibit 8	NPDES Permit Application
Exhibit 11	WDFW Hydraulic Permit Waiver Letter
Exhibit 13	Letter of Interest from City of Kittitas for Project Water Supply
Exhibit 21	Project Area Fire Districts
Exhibit 28	DOE Sand and Gravel General Permit Application
Exhibit 29	Surrounding Land Parcels
Exhibit 30A	Option Agreement Memorandum
Exhibit 30B	Land Lease – DNR

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

Exhibit 30C Letter of Permission to Include WDFW Lands in Permit Application
Exhibit 31 EMF
Exhibit 32 BPA Letter of Non-participation in SEPA Process

Q Are you familiar with these sections of the Application and exhibits?

A Yes

Q Did you prepare these sections and exhibits, or, if not, did you supervise their preparation or are you familiar with them?

A Yes.

Q Are the contents of these sections and exhibits of the Application either based upon your own knowledge, or upon evidence, such as studies and reports that reasonably prudent persons in your field are accustomed to rely on in the conduct of their affairs?

A Yes.

Q To the best of your knowledge, are the contents of these sections and exhibits of the Application true?

A Yes.

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

Q Do you incorporate the facts and content of these sections and exhibits as part of your testimony?

A Yes.

Q Are you able to answer questions under cross examination regarding these sections and exhibits?

A Yes

Q Do you sponsor the admission into evidence of these sections and exhibits of the Application?

A Yes

Q Are there any corrections or clarifications to be made to those portions of the Application that you are sponsoring?

A I would like to point out that the Section 1.6.11 Summary of Cumulative Impacts, Air Quality and Section 3.17.16 Existing Conditions, Impacts, and Mitigation Measures, Cumulative Impacts, Air Quality, are co-sponsored by Mark Bastasch and myself. Mark Bastasch was responsible for the portions related to fugitive dust.

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

A number of utilities in the region, including Puget Sound Energy, Inc. ("PSE"), Avista, and PacifiCorp, have issued requests for proposals ("RFPs") to which the Applicant has responded with proposals for the Project. PSE, as a regulated utility in the State of Washington, prepared a Least Cost Plan ("LCP") in response to state requirements that was submitted to and accepted by the Washington Utilities and Transportation Commission ("WUTC"). Following the resource acquisition strategy set forth in its LCP, PSE conducted a resource acquisition process which included a RFP for Wind Power Resources and a RFP from All Generation Sources in which the Project was identified as a least cost source of energy consistent with the public interest and convenience. In September 2004 Applicant signed a Letter of Intent (LOI) with Puget Sound Energy (PSE) to purchase the Wild Horse Wind Power Project and associated facilities from the Applicant to serve PSE's customers' growing demand for power in both Kittitas County and other parts of PSE's service territory. The Project would thus provide needed electricity for local PSE customers.

On September 10, 2004, Applicant entered into an agreement with Kittitas County Rural Fire District #2 to provide fire protection services during the construction and operation of the Project. A copy of this agreement has been included as Exhibit 20-2 (AY-2).

Applicant has committed to the use of free-standing permanent meteorological towers (un-guyed) to eliminate the risk of avian and wildlife collision with guy wires

Also, there have been some recent developments causing minor changes in some turbine locations prior to final design within the Project Site Layout.

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

Q. Could you please summarize and briefly describe these developments.

A. Through the notification process with the Federal Aviation Administration (FAA) for the Project to ensure no impacts to flight safety we became aware of a 4,000 feet above mean sea level (amsl) structure height limit over the Project site. Nine turbines in the original layout had the potential to exceed this limit. Rather than attempting to request that FAA alter the flight altitude limits for the area, it was decided to remove these nine turbines. FAA review is one of the siting criteria is discussed in Section 2.5.2.1 of the ASC. In August 2004, the FAA issued Determination of Non-Hazard Certificates for all of the proposed turbines and met towers in the Project other than turbines A1, A2, A3, B1, B2, B3, D1, D2, and D3. Turbines will be removed from these locations. A few of these turbines may be relocated within the corridors of the other turbine strings pursuant to the siting parameters set forth in the ASC.

Applicant has also relocated the proposed PSE interconnection substation. The PSE interconnection interconnect substation is now proposed for a location to the east of Stevens Road in the southeast quarter of the southwest quarter of Section 14 and the northeast quarter of the northwest quarter of Section 23, in Township 17 north, Range 21 east. Access to the PSE interconnect substation will be achieved at a new access driveway from Stevens Road to the west. The new substation location offers easier access for both construction and operations compared to the original location. Also, the new location is expected to be far less visible as it is situated on lower lying ground than the original location and will not be as visually prominent from I-90 or other major public vantage points.

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

Q Would you please summarize and briefly describe the Wild Horse Wind Power Project and its related facilities?

A Yes. The Wild Horse Wind Power Project ("Project") will be built on the high open ridge tops near Whiskey Dick Mountain between the towns of Kittitas and Vantage at the eastern end of the Kittitas Valley at a site located approximately 11 miles east of the City of Kittitas. The ridges rise as high as 2,400 feet above the Yakima River Valley to the west and nearly 3,000 feet above the Columbia River to the east. Maps showing the Project location are presented in Section 2.2.2, 'Project Location' and in Exhibit 1-A, 'Project Area Overview'. All of the main Project facilities are illustrated on Project Site Layouts contained in Exhibits 1-B, 1-C, 1-D and 1-E of the Application and described in detail in Section 2.2.1 'Project Summary/Introduction' and Section 2.2.3 'Project Facilities'. The Project consists of several prime elements which will be constructed in consecutive phases including roads, foundations, underground and overhead collection system electrical lines, grid interconnection substation(s), step-up substation(s), transmission feeder line(s) running from the on-site step-up substation(s) to the interconnection substation(s), an operations and maintenance (O&M) center and associated supporting infrastructure and facilities. The entire Project area encompasses approximately 8,600 acres. A permanent footprint of approximately 165 acres of land area will be required to accommodate the proposed turbines and related support facilities. The operations and

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

maintenance facility will utilize a septic system, which complies with Washington State Department of Health and Kittitas County standards.

Q. Would you please describe the wind turbines to be used for the Project and summarize how they work?

A. The wind turbines consist of 3 main elements: a 3-bladed rotor, a tubular steel tower and a machine house at the top of the tower called the nacelle. This is illustrated and discussed in Section 2.2.3.3, 'Wind Turbine Generators and Central Control System' of the ASC. The wind turbines operate on the principal of aerodynamic lift very much like the principals of a propeller on an airplane. Unlike the propeller however, the wind turbines do not create wind flow, but rather, they are driven by the wind. The wind turbines convert wind energy into electrical energy. Wind passing over the rotor blades creates lift and causes the rotor and the main rotor shaft to spin. The main rotor shaft connects to a gearbox that increases the rotational speed from the main shaft to a high speed shaft. The high speed shaft connects to an electrical generator. The electrical generator converts rotational power into electrical power.

As stated in Section 2.2.1 'Project Summary/Introduction' and Section 2.2.3 'Project Facilities, Project will consist of up to 158 wind turbines and have an installed nameplate capacity of up to 312 megawatts (MW). The Project will utilize 3-bladed wind turbines on tubular steel towers each ranging from 1 MW to 3 MW (generator nameplate capacity) and with rotor diameters ranging from 60 to 90 meters (197 to 295 feet) as shown in Figure 2.2.1-1 of the Application. For the smallest turbine contemplated for the Project,

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

with a rotor diameter of 60 meters and each with a nameplate capacity of 1 MW, up to 158 units would be installed for a Project nameplate capacity of 158 MW. If the largest contemplated turbine, with a rotor diameter of 90 meters and generator nameplate 3 MW is used, up to 104 units would be installed for a Project capacity of 312 MW. The Project Site Layout in Exhibit 1-B shows 136 turbines of 1.5 MW each with a turbine spacing based on a 70.5 meter (231 ft.) rotor diameter. This scenario is in the middle of the range of turbines under consideration for the Project.

Regardless of which size of turbine is finally selected for the Project, the turbines will generally be installed along the roadways as indicated on the Site Layout and all construction activities would occur within the same corridors with any final adjustments to specific turbine locations made to maintain adequate spacing between turbines for optimized energy efficiency and to compensate for local conditions as described in Section 2.2.1, 'Project Summary/Introduction', 'Project Turbine Scenarios', of the Application. Exhibit 1-D illustrates the Project site layout with the smaller sized turbine scenario (60 meter rotor diameter) and Exhibit 1-E illustrates the Project site layout with larger turbines (90 meter rotor diameter). A summary of the Project Scenarios is tabulated in Table 2.2.1-1 of the Application and a scale diagram comparing the various turbines sizes to some of the nearby BPA transmission towers is contained in Exhibit 1-F of the Application.

The size and type of turbine used for the Project will largely depend on the safety, operational history, quality, price, performance and reliability history, power characteristics, guarantees, financial strength of the supplier, and the availability of a

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

particular type of wind turbine at the time of construction. Requests for proposals (RFPs) for wind energy from utilities are designed to procure delivered energy from a wind power facility to their grid. RFPs are designed to encourage competitive pricing and as such they are not specifically designed to limit proposals to a specific size or type, make or model of wind turbine.

Q. Would you please summarize and briefly describe how a wind power project works and how it delivers power to the transmission system?

A. Section 2.2.3.4, 'Electrical Collection System Infrastructure' of the Application includes a description of how the Project works and how power is delivered to the utility grid. The generator of each wind turbine feeds electricity to cables, which run down the tower and connect to an electrical circuit breaker in an electrical cabinet inside the base of the turbine tower. Cables run from the ground cabinet through underground conduits to high voltage cables which run underground from one turbine to the next and collect all of the power from all of the wind turbines in an underground collection system at 34.5 kilovolts (kV). Where cables run in multiple directions, a pad mounted junction panel is used to connect the cables. All of the feeder lines run back to the main substation where all of the power from the entire Project is collected and fed into one or more large transformers. Power is transformed from 34.5 kV to a higher voltage, either 230 or 287 kV, and fed through the transmission feeder line(s) to interconnect to the main utility grid. Figure 2.2.3.3-3 illustrates the electrical system of the Project in a schematic form and Exhibit 2 of the ASC contains a sample electrical one-line diagram of the Project interconnection substation.

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

Q. Would you please summarize and briefly describe the construction process and schedule for the Project?

A Section 2.2.5, 'Construction Methodology' and Section 2.2.6, 'Construction Schedule and Workforce' of the ASC explain the general construction approach and schedule for the Project. The construction process will last approximately 8 to 12 months depending on weather and the required schedule to meet commitments to power purchasers. Construction will be preceded by a detailed design phase, which includes on-site surveys to stake the roadways, turbines, meteorological towers, cable locations, the substation facilities and other Project facilities. Once the design phase is complete, construction begins with the clearing and grading of the roadways. Once a section of roadway is complete, the road construction group moves on to the next section of roadway and the foundation crews mobilize behind them. Foundation construction requires the blasting and excavating of holes, setting of forms and reinforcement steel and the casting of concrete. Once a row of foundations is complete, the electrical collection system construction crews mobilize to the area and install the underground power and signal cables.

Following the electrical crews, the heavy turbine equipment is transported to the individual turbine sites and offloaded. Each turbine tower arrives in 3 or 4 sections. Large cranes move from one turbine site to the next to erect each tower section. Once the tower has been fully erected, assembled, and fastened to the foundation, the nacelle is erected by crane to the top of the tower and mounted in place. The rotor is usually the final item to be erected and it is mounted to the nacelle. Final mechanical assembly of

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

the turbine foundation, tower, nacelle and rotor is confirmed through detailed quality control inspection routines for every critical nut and bolt and electrical termination point on the machine. This is further verified through a formal quality assurance plan executed by on-site engineers. Once the electrical system is fully connected and has been tested, a careful step-by-step plan is executed to energize the substation and the Project electrical collection system. Once the electrical system is energized, each turbine is run through a rigorous testing and commissioning procedure to ensure proper functioning before it is cleared for automated operation. Turbines are inspected, tested, commissioned and brought on-line one-by-one until the full Project is commissioned and turned over to the operations and maintenance group.

Q Please describe the air emissions and dust control that will occur during the construction of the Project.

A As it is a wind power project, the Project does not generate any air emissions from its operation. The only emissions are those from construction vehicles and equipment and the operations vehicles, most likely pick-up trucks or vans. Section 3.2.2, 'Impacts of the Proposed Action' of the ASC provides details regarding vehicle and equipment emissions and Section 3.2.2.1, 'Construction, Fugitive Dust Control', contains details about dust control for the Project. Wind blown dust resulting from vehicle traffic during the operation of the Project is negligible due to low volume of traffic. Dust generation during construction will mainly be from construction vehicle and equipment traffic. During road construction, roads are wetted down to achieve the required soil compaction. This also acts as dust suppression. Additionally, a dust control program of wetting the

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

roads in potential problem areas will be implemented to keep dust levels down so as to avoid creating a nuisance.

Q Would you please briefly describe the construction management plan for the Project?

A Section 4.4, 'Construction Management' of the ASC details the construction management plan for the Project. Figure 4.4-1 illustrates a typical project construction management organizational structure. The construction project manager will be supported by an engineering team, which will oversee and review detailed design work and an on-site construction team, which will handle day-to-day construction activities including quality assurance, safety, and environmental monitoring.

Q Would you please summarize and briefly describe the components, related equipment and discharges normally part of a thermal power plant that do not exist and are not relevant to a wind farm?

A There are several elements of a thermal power plant that wind power projects do not require. Wind power projects do not have a heat dissipation system since there is no combustion. There is no fuel supply system, such as a gas pipeline. There is no water supply system, aquatic discharges or waste-water treatment for cooling systems. There are no operational emissions from combustion such as SOx, NOx, CO, CO2.

Q Would you summarize and briefly describe the operations plan for the Wild Horse Wind Power Project?

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

A Section 2.2.7, 'Operations Maintenance', of the ASC describes the general operation and maintenance (or O&M) plan for the Project. Approximately 12 to 20 on-site staff will operate the Project. The turbines operate independently and are fully automated. The O&M staff will manage all of the regularly scheduled and occasional unscheduled maintenance routines on all of the wind turbines, electrical systems and other Project facilities. The turbines require scheduled maintenance to be performed for approximately 2 to 3 days on each unit approximately every 6 months. There will be a team of 2 technicians, traveling from turbine to turbine in a service vehicle, to perform the scheduled maintenance and repairs. The main site access road will be driven daily multiple times. Other turbine string roads with few turbines may not be driven for several consecutive days. Each wind turbine has its own independent control system which is also connected to a central computer monitoring system called a SCADA system which stands for Supervisory Control and Data Acquisition. The Project SCADA system communicates with all of the individual turbines and the substations and will send pager or cell phone messages to on-call technicians in the event of any emergency notification or critical outage.

Q Would you summarize and briefly describe any hazardous materials, which may be present at the site and the measures that will be utilized regarding spill prevention and control and the plan for mitigating potential releases of hazardous material into the environment?

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

A. Diesel fuel, used for construction equipment, is the only potentially hazardous material that will be used during the construction of the Project. Operation of the Project does not require the use of any hazardous materials on site. The turbines use mineral oil for lubrication and will undergo periodic oil changes on a turbine-by-turbine basis and the waste oil will be recycled or disposed of at a licensed facility. All transformers are also filled with mineral oil, which is not a hazardous material. Section 3.16.1.3, 'Spillage Prevention and Control', and Section 4.6.12 'Chemical or Oil Spill Release' of the ASC provides details of the spill prevention and control plan for the Project including dealing with potential fuel spills during construction and operations. A Spill Prevention and Control Plan will be submitted to EFSEC prior to construction and/or operations of the Project. Measures to prevent potential spills include automatic shut-off valves on fuel trucks used on site during construction, installing a special oil containment system around the substation transformers and all wind turbines are equipped with a retention system to contain potential spills inside the turbine. The spill control plan will include guidelines which will include procedures for containing any accidental spills with earth berms and notification procedures to the Department of Ecology to determine appropriate actions in compliance with CERCLA (Comprehensive Environmental Response and Compensation and Liability Act of 1980) and MTCA (Model Toxics Control Act of 1988).

Q Would you please summarize and briefly describe your evaluation of water resource needs for the Project?

A Water will be required during the construction of the Project, primarily for the rock crusher, batch plant operations, road base compaction and dust suppression. As stated in

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

ASC Section 3.3.2.3, 'Water Use During Construction', the amount of water needed will depend upon whether an environmentally benign dust palliative such as lignin is used (which would reduce the amount of water needed for dust suppression), as well as timing and weather. Estimated water use for all construction-related needs, including dust control, is approximately 11 million gallons. The Applicant anticipates that the general construction contractor will make arrangements for construction phase water, from offsite existing sources with valid water rights, with water delivered to the site via water trucks.

During the operations phase, water will be needed for kitchen, bathroom and general maintenance use at the operations and maintenance facility. The O&M phase water need is estimated be less than 1,000 gallons per day and will be provided and trucked from an offsite source with a valid, existing water right.

Q Would you briefly describe the plans to address the risk of fire and explosion and other emergencies regarding the Project?

A Section 3.16.1.1'Risk of Fire and Explosion' of the ASC provides details of, potential fire or explosion risks for the Project along with the mitigation measures for each of the potential risk sources. Fire risk is higher during construction than during operations due to the amount of construction equipment and the number of personnel on site. Fire risk during operations is minimal. Since there is no combustion process as with a conventional thermal power plant, the risk of fire and explosion is very low. Section 4.6, 'Emergency Plans', also includes details regarding the prevention of fires and explosion during construction and operations of the Project. Detailed measures will be specified in

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

the on-site safety programs including: the Construction Written Safety Program, the Construction On-Site Fire Suppression and Prevention Program, the Operational Safety Program, the Operations Written Safety Program and the plant Emergency Action Plan and the plant Fire Prevention Plan. As outlined in detail in Section 4.6.6 of the Application, the fire prevention plan will be developed and implemented in coordination with the Kittitas County Fire Marshall and Ellensburg Rural Fire District #2 and will contain several measures including, but not limited to: fire prevention and fire safety training for project personnel with the fire district and with local emergency responders, maintaining fire extinguishers in all O&M vehicles and installing fire station boxes at multiple locations on the Project site, restricting smoking to designated low fire risk areas, maintaining dedicated water trucks on site during construction in the fire season, restricting gas vehicles with catalytic converters from travel outside of graveled areas during the fire season, designing the Project to meet all National Fire Protection Association (NFPA) and National Electric Codes (NEC). Application has entered into a fire protection services agreement with Kittitas County Rural Fire District #2 for the construction and operation of the Project. A copy of this agreement has been included as Exhibit 20-2 (AY-2).

Q Would you summarize and briefly describe the security plan for the Project during both construction and on-going operations?

A Section 3.16.4.6, 'Security', of the ASC provides details of the security plans during construction and operation of the Project. There will be on-site security personnel during construction. During operations, it is not expected that there will be full time security

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

personnel on-site. Experience shows that terrorism, sabotage or other similar threats are not significant concerns for wind power projects because of their modular nature and limited vulnerability. Limited vandalism and petty theft of tools and/or equipment has occurred on some wind power projects. A full time security plan will be implemented during Project construction and once construction is completed, a comprehensive operations security plan will be implemented along with a detailed emergency plans, which is more fully described in Section 4.6 'Emergency Plans' of the ASC.

Q Would you summarize and briefly describe the emergency plan for the Project during both construction and on-going operations?

A Information regarding the emergency plan for the Project is contained in Section 4.6, 'Emergency Plans' of the ASC. On-site emergency plans will be prepared to protect the public health, safety and environment on and off the Project site in the case of a major natural or man made disaster affecting the Project. The Applicant shall prepare the plan and be responsible for implementing the plan with its operations team in coordination with local emergency responders. The plan will describe the emergency response procedures to be implemented during various emergency situations that could affect the Project or the surrounding community or environment.

Q How will plans such as the 'Emergency Plan" and 'Security Plan" be developed?

A The Applicant will develop the plans and submit them to EFSEC for review and approval prior to the construction and operation of the Project. It is my understanding that EFSEC

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

will have the relevant agencies review them and provide input prior to approval. Plans related to construction will be approved prior to commencement of construction, and plans related to operation will be approved prior to commencement of operation.

Q Would you summarize and briefly describe the various alternatives considered for the Project other than the different turbine sizes, which you have already discussed?

A Yes. We considered a number of alternative sites all over Oregon and Washington. Since early 2001, we have explored the Northwest for prospective viable site locations for wind power projects. We employed the expertise of several expert meteorologists, transmission engineers and land use experts to support these prospecting efforts. Through this 3 year effort, we have examined and reviewed hundreds of potential sites and evaluated them on the basis of the key elements that are required for a viable wind power project site which are: a strong wind resource, available transmission, willing landowners, accessibility, and an absence of significant environmental constraints. I have been involved in the business of prospecting for and evaluating wind power project sites since 1996. Using the BPA Wind Regional Energy Assessment Program (Wind REAP) conducted in the 1980's and published in 1985 as a starting point, we sifted through more than 300 potential sites in the Northwest and worked closely with several of the key personnel who conducted the original study work. We further utilized other wind data sets as well as the wind resource maps of Oregon and Washington prepared by NREL (U.S. DOE, National Renewable Energy Lab) and sifted through dozens of additional potential wind energy sites. The list was then narrowed to potentially viable wind resource sites and further reduced on the basis of their available transmission capacity,

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

transmission access and physical accessibility, landowner interest, and absence of major environmental constraints. The results of these rigorous efforts revealed several sites, which were then field tested with meteorological test towers. Our field testing narrowed the number of potential sites to two in the state of Washington: the Kittitas Valley Wind Power Project and the Wild Horse Wind Power Project.

Section 2.3 of the ASC, 'Alternatives' discusses the various alternatives considered as part of our examination of the Wild Wind Power Project.

Q Would you summarize and briefly describe the measures to ensure that a safe turbine design is selected for the Project

A In order to finance a large scale wind power project, financing and lending institutions insist on having a well proven and well documented wind turbines with a 3rd party verification for compliance with local and international codes and standards for safety and performance. This is the same standard that is required by most insurance companies in order to obtain an insurance policy for the Project. Having valid insurance is also a financing requirement. All of the wind turbines under consideration for the Project will require 3rd party independent certification. The best known certification agencies for wind turbines are Germanischer Lloyd of Germany, Det Norske Veritas of Norway and RISØ of Denmark.

Q Please summarize and briefly describe the measures to mitigate the risk of potential ice throws from wind turbines.

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com

A First it should be noted that the potential risk to the public from ice thrown from wind turbines at the Project is minimal. This subject is addressed in greater detail by other witnesses. Applicant commissioned a study performed by a leading wind engineering firm, Garrad Hassan, that was included as part of the Clarification documentation provided to EFSEC on June 25, 2003 to examine the furthest documented distance of ice thrown by a wind turbine which revealed that the furthest distance was 100 meters (328 feet). Since all of the Project wind turbines are more than 1 mile (5,280 feet) from any public road, ice throw does not present a significant risk to the public.

DARREL L. PEEPLES, ATTORNEY AT LAW
325 WASHINGTON ST. NE #440
OLYMPIA, WA 98506
TEL. (360) 943-9528 FAX (360) 943-1611
dpeeples@ix.netcom.com